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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,424	12/17/2003	Peter Wirtz	WIRTZ-1	8332
25889	7590	02/16/2006	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			KIM, YOON YOUNG	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/738,424

Applicant(s)

WIRTZ, PETER

Examiner

Yoon-Young Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 28-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/17/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of a filter body in the reply filed on December 12, 2005 is acknowledged. The traversal is on the ground(s) that a search of the invention would include a search of the nonelected invention. This is not found persuasive because Group I and Group II are in two different classes.

The requirement is still deemed proper and is therefore made FINAL.

Claims 28-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 12, 2005.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 6-9, 12, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Persson et al., U.S. Patent No. 5,076,924.

Regarding Claim 1, Persson discloses a filter material consisting of two stacked grid members (#1, 4) characterized in that the grid members have a weld joint (#5) between them.

Regarding Claim 6, Persson discloses that at least one grid member has between 5 or 10 and 1500 or 1200 yarns per cm (Col. 2, Lines 30-35).

Regarding Claim 7, Persson discloses that the stacked grid members have differing structures (Fig. 1).

Regarding Claim 8, Persson discloses that one grid member is finer than another grid member (Col. 2, Lines 30-35).

Regarding Claim 9, Persson discloses that one grid member has openings of more than 5 mm in diameter (Col. 2, Lines 6-11).

Regarding Claim 12, Persson discloses that one grid member is an expanded metal (Col. 2, Lines 27-30).

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Regarding Claim 15, Persson discloses that the stacked grid members are made from different materials (Col. 2, Lines 27-30).

4. Claims 1-2, 7-8, 12, 14, 17-19, and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Lisson et al., U. S. Patent No. 6,096,117.

Regarding Claim 1, Lisson discloses a filter material consisting of two stacked grid members (#5, 6, 8, 10) characterized in that the grid members have a weld joint (Col. 3, Lines 35-40) between them.

Regarding Claim 2, Lisson discloses that the grid members are unmilled (Fig. 2).

Regarding Claim 7, Lisson discloses that the stacked grid members have differing structures (Fig. 2).

Regarding Claim 8, Lisson discloses that one grid member is finer than another grid member (Col. 23, Lines 22-35).

Regarding Claim 12, Lisson discloses that one grid member is an expanded metal (Col. 3, Lines 35-43).

Regarding Claim 14, Lisson discloses that the filter material is comprised of more than two stacked grid members (Fig. 2).

Regarding Claim 17, Lisson discloses that spacers (#4) are disposed between two grid members.

Regarding Claim 18, Lisson does not disclose that the spacers are welded to the grid members. Determination of patentability in "product by process" claims is based on product itself. In re Thorpe, 227 USDQ 964 (1985). The attachment method of Lisson is deemed to be a structure alternative to the welding process.

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Regarding Claim 19, Lisson discloses that a filter material is comprised of two grid members with a fine structure (#6, 8) that are welded to grid members having a coarser structure (#5, 10) and that spacers (#4) are disposed between the grid members having the coarser structure.

Regarding Claim 26, Lisson discloses that the filter body (#1) comprises the filter material (#3).

Regarding Claim 27, Lisson discloses that the filter body is a filter frame, a filter plate, a filter with a U-shaped profile, a filter ring, or a filter cylinder (Fig. 1).

5. Claims 1-2, 7-8, 12, 16, 20-22, and 26-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Simone, U.S. Patent No. 6,514,408 B1.

Regarding Claim 1, Simone discloses a filter material consisting of two stacked grid members (#38, 40) characterized in that the grid members have a weld joint (#42) between them.

Regarding Claim 2, Simone discloses that the grid members are unmilled (Fig. 1).

Regarding Claim 7, Simone discloses that the stacked grid members have differing structures (Fig. 1).

Regarding Claim 8, Simone discloses that one grid member is finer than another grid member (Col. 3, Lines 8-15).

Regarding Claim 12, Simone discloses that one grid member is an expanded metal (Col. 3, Lines 2-5).

Regarding Claim 16, Simone discloses that the filter material comprises a weld flange (#42).

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Regarding Claim 20, Simone discloses that in the border regions the filter material is comprised of a metal strip (#48) in the direction of its longitudinal axis.

Regarding Claim 21, Simone discloses that the sheet metal strip is less than 100 mm wide (Col. 4, Lines 10-13).

Regarding Claim 22, Simone discloses that the sheet metal strip projects at least partially beyond at least one grid member (Fig. 2, 3, 5).

Regarding Claim 26, Simone discloses that the filter body comprises the filter material (#30).

Regarding Claim 27, Simone discloses that the filter body is a filter frame, a filter plate, a filter with a U-shaped profile, a filter ring, or a filter cylinder (Fig. 1).

6. Claims 1, 3, 11-12, 14, 20, and 22-27 are rejected under 35 U.S.C. 102(a) and (e) as being anticipated by Adams et al., Pub. No. US 2002/0130064 A1.

Regarding Claim 1, Adams discloses a filter material consisting of two stacked grid members (#224, 226) characterized in that the grid members have a weld joint between them (Par. 157).

Regarding Claim 3, Adams discloses that the grid members have structural elevations and depressions and are bonded together in the region of their contact points (Fig. 31).

Regarding Claim 11, Adams discloses that one grid member is a fabric (Par. 9).

Regarding Claim 12, Adams discloses that one grid member is an expanded metal (Par. 155).

Regarding Claim 14, Adams discloses that the filter material is comprised of more than two stacked grid members (Fig. 30B).

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Regarding Claim 20, Adams discloses that in the border regions the filter material is comprised of a sheet metal strip (Par. 155, 169) in the direction of its longitudinal axis (#265, 266).

Regarding Claim 22, Adams discloses that the sheet metal strip projects at least partially beyond at least one grid member (Fig. 37A).

Regarding Claim 23, Adams discloses that two sheet metal strips are welded together (Par. 139).

Regarding Claim 24, Adams discloses that the filter material comprises a frame (Fig. 36A).

Regarding Claim 25, Adams discloses that the frame (#253) is at least partially disposed between two grid members.

Regarding Claim 26, Adams discloses that the filter body comprises a filter material (#267).

Regarding Claim 27, Adams discloses that the filter body is a filter frame, a filter plate, a filter with a U-shaped profile, a filter ring, or a filter cylinder (Par. 9).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Denton et al., Pub. No. US 2002/0144942 A1.



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Regarding Claims 4-5, Adams does not disclose the number of weld joints. Denton teaches a filter material comprising more than 7 to 20 weld joints per axial inch (Par. 47, 49). One of skill in the art would by routine experimentation find the optimum number of weld joints. It is not inventive to discover the optimum or workable ranges by routine experimentation when the general conditions of a claim are disclosed in the prior art. In re Aller, 105 USPQ 233, 235 (CCPA 1955).

Regarding Claim 10, Adams does not disclose the opening diameter. Denton teaches a grid member comprising 0.090 inch x 0.090 inch square openings (Par. 46). One of skill in the art would by routine experimentation find the optimum opening diameter. It is not inventive to discover the optimum or workable ranges by routine experimentation when the general conditions of a claim are disclosed in the prior art. In re Aller, 105 USPQ 233, 235 (CCPA 1955).

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simone in view of Sprenger et al., U.S. Patent No. 6,415,930 B1.

Regarding Claim 13, Simone does not disclose a coarser grid structure disposed between two grid members. Sprenger teaches a filter material comprising a coarser grid member (#12) disposed between two finer structures (#14, 16). It would have been obvious to one of ordinary skill in the art to modify Simone with the element of Sprenger in order to provide a rigid cylinder support (Col. 2, Lines 50-55).

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**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK  
02/09/06

  
JOHN KIM  
Primary PATENT EXAMINER